

Date: Thursday, 1/17/2008 3:23:58 PM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : DUCT	
Job Number : 36813		
Estimate Number : 12316		
P.O. Number :	Part Number : D34733	
This Issue : 1/17/2008 S.O. No. :	Drawing Number : D3473 REV B	OK PER Rev. B 08.01.10
Prsht Rev. : NC	Project Number : N/A	
First Issue : / / Type : SMALL /MED FAB	Drawing Revision : B	
Previous Run : 34419	Material :	
Written By :	Due Date : 2/10/2008	Qty: 10 Um: Each
Checked & Approved By : <u>08 01 18</u>		
Comment : Est Rev:A New Issue 06-03-02 JLM		
Est Rev:B As per Rev B 06-05-24 JLM		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M304S26GA	304/316 0.018 SHEET
-----	-----------	---------------------



Comment: Qty.: 0.3321 sf(s)/Unit Total : 3.3212 sf(s)

304/316 0.018 SHEET

Batch: 105591 IB 8-1-23

2.0	WATER JET <u>105591</u>	FLOW WATER JET
-----	-------------------------	----------------



Comment: FLOW WATER JET

Cut as per Dwg D3473

Dwg Rev: B IB 8-1-23

Prog Rev: B

(10)

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



IB 8-1-23

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

08/1/25

(10)

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
-----	-------------	-------------------------------



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Deburr if necessary. IB 8-1-23

2-Form as per Dwg D3473 using DT8860

08/1/28 (10)

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☐ No ☒ DQA: AD Date: 08/01/13  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 1/17/2008 3:23:58 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUCT

Job Number: 36813

Part Number: D34733

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

8/08/09 (10)

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 163

8/1/30 SP (10x)

8.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

(10)  
8/08/09/31

Job Completion



mi 2008/1/30 (10)  
W

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

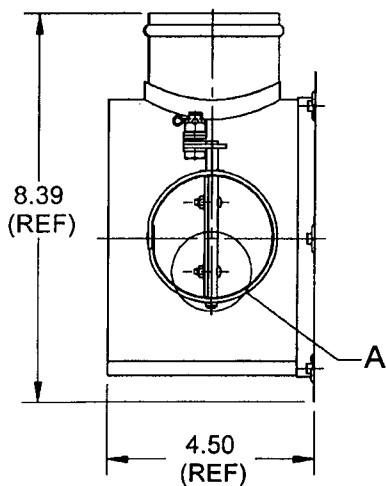
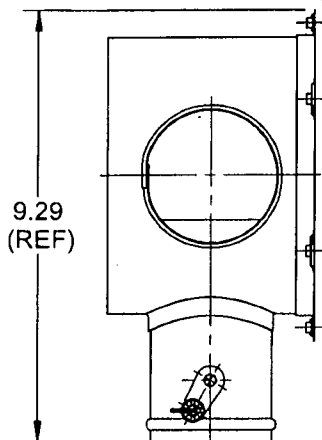
**NOTE:** Date & initial all entries





DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3473</b>	REV. B SHEET 1 OF 7
DATE <b>06.05.16</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:4
A	06.02.07	NEW ISSUE	
B	06.05.16	D3473-5F/-7F: 9.750 & 8.810 WERE 9.60 & 8.60	

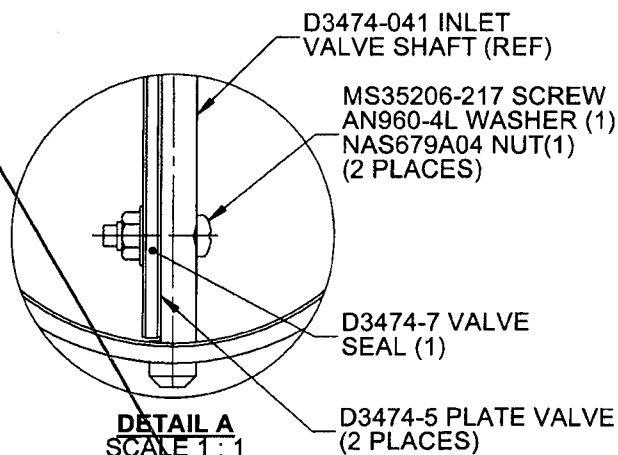
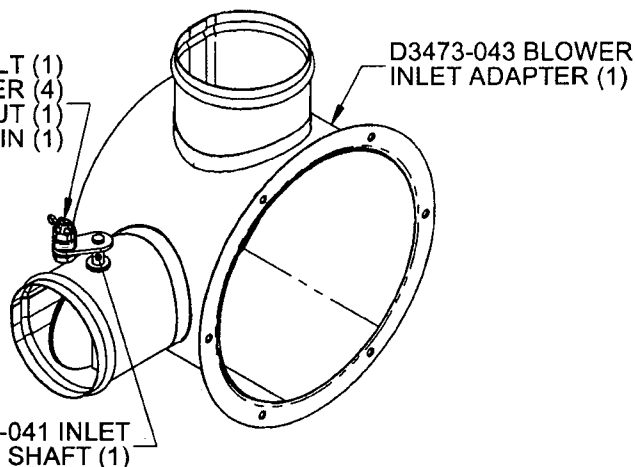
RELEASED  
06-05-16



UNDER REVIEW

02.09.03  
Dir. + Manufacturing  
(Chubb)

D3470-9 BOLT (1)  
AN960-416 WASHER (4)  
AN310-4 NUT (1)  
MS24665-153 COTTER PIN (1)



### D3473-041 BLOWER INLET ADAPTER

#### NOTES:

- 1) IDENTIFY WITH DART P/N D3473-041 USING FINE POINT PERMANENT INK MARKER
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3473-041	BLOWER INLET ADAPTER
1	D3470-9	BOLT
1	D3471-043	BLOWER INLET WELDMENT
1	D3474-041	INLET VALVE SHAFT
2	D3474-5	BUTTERFLY VALVE
1	D3474-7	BUTTERFLY VALVE SEAL
1	AN310-4	NUT
2	AN960-4L	WASHER
4	AN960-416	WASHER
1	MS24665-153	COTTER PIN
2	MS35206-217	SCREW
2	NAS679-A04	NUT

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 36813

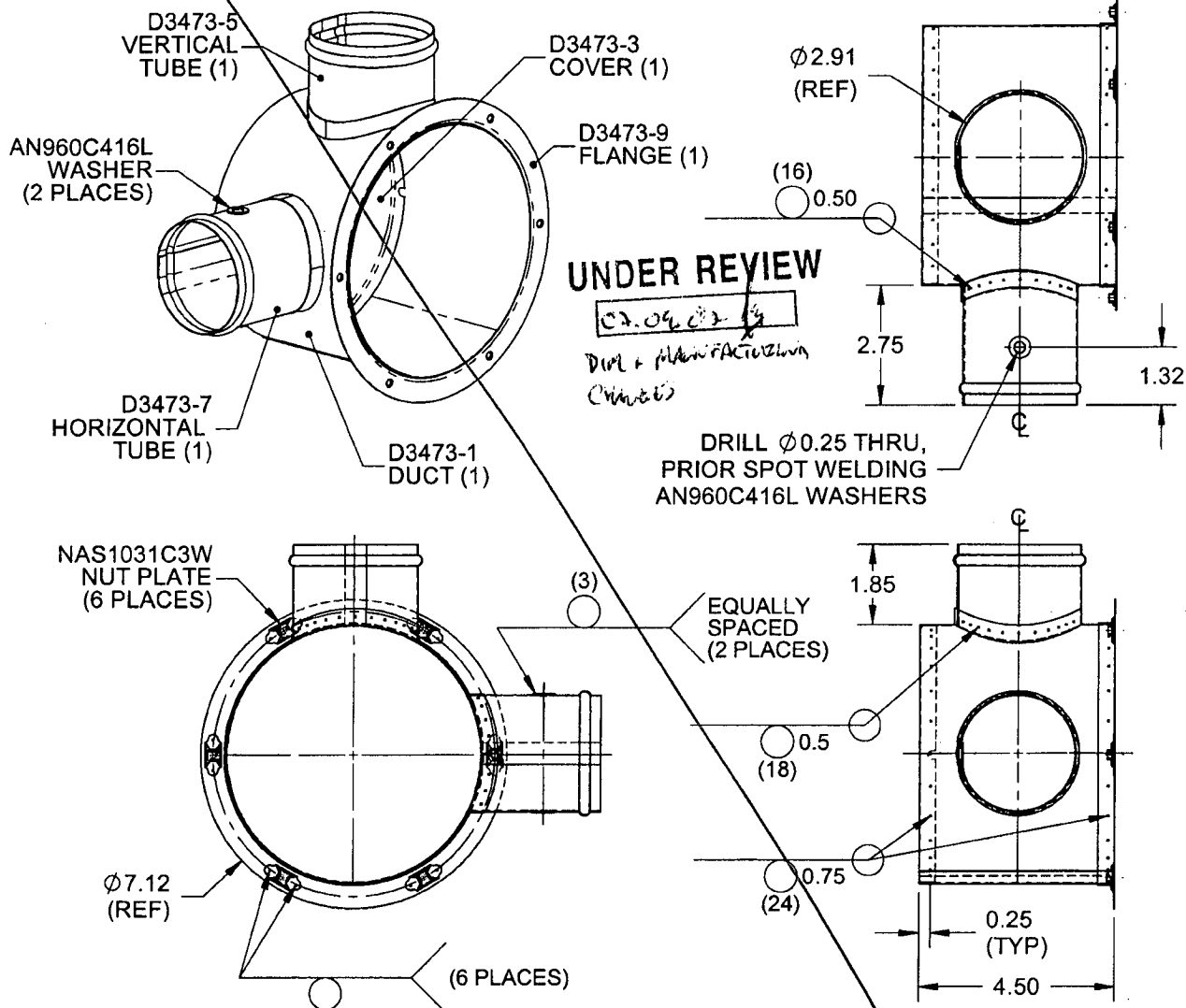
COPYRIGHT © 2006 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN <i>JB</i>	DRAWN BY <i>JB</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>H</i>	APPROVED <i>H</i>	DRAWING NO. <b>D3473</b>	REV. B SHEET 2 OF 7
DATE <b>06.05.16</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:4

**RELEASED**  
06.05.16



### **D3473-043 BLOWER INLET WELDMENT**

#### **NOTES:**

- 1) SPOT WELD PER DART QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3473-043	BLOWER INLET WELDMENT
1	D3473-1	DUCT
1	D3473-3	COVER
1	D3473-5	VERTICAL TUBE
1	D3473-7	HORIZONTAL TUBE
1	D3473-9	FLANGE
2	AN960C416L	WASHER
6	NAS1031C3W	NUT PLATE

**COPYRIGHT © 2006 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3473	REV. B SHEET 3 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER	SCALE 1:4

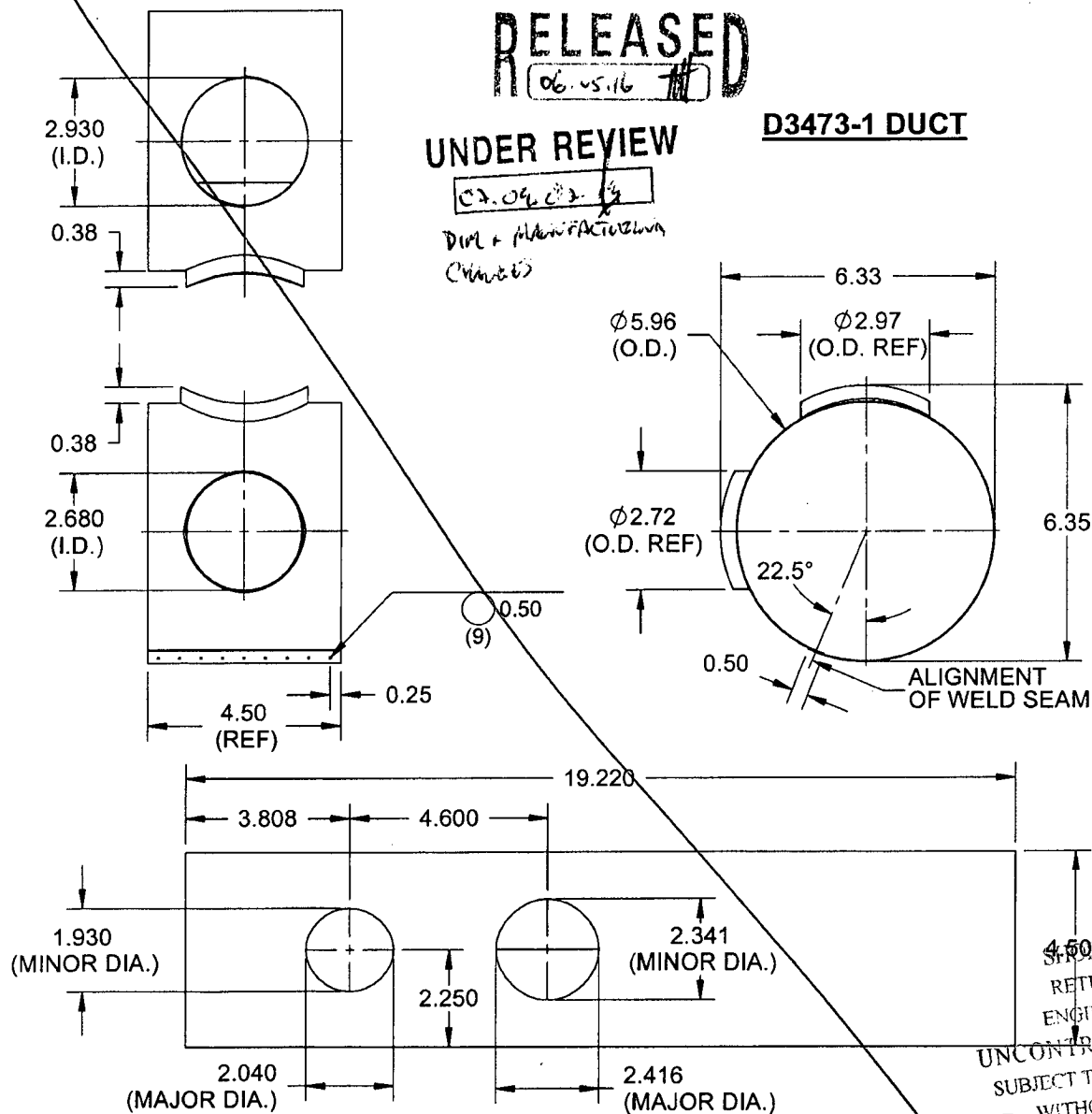
RELEASED  
06.05.16

UNDER REVIEW

02.04.03

Dim + Manufacturing  
Changes

### D3473-1 DUCT



### D3473-1F DUCT FLAT PATTERN

#### NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED)  
2B FINISH 26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

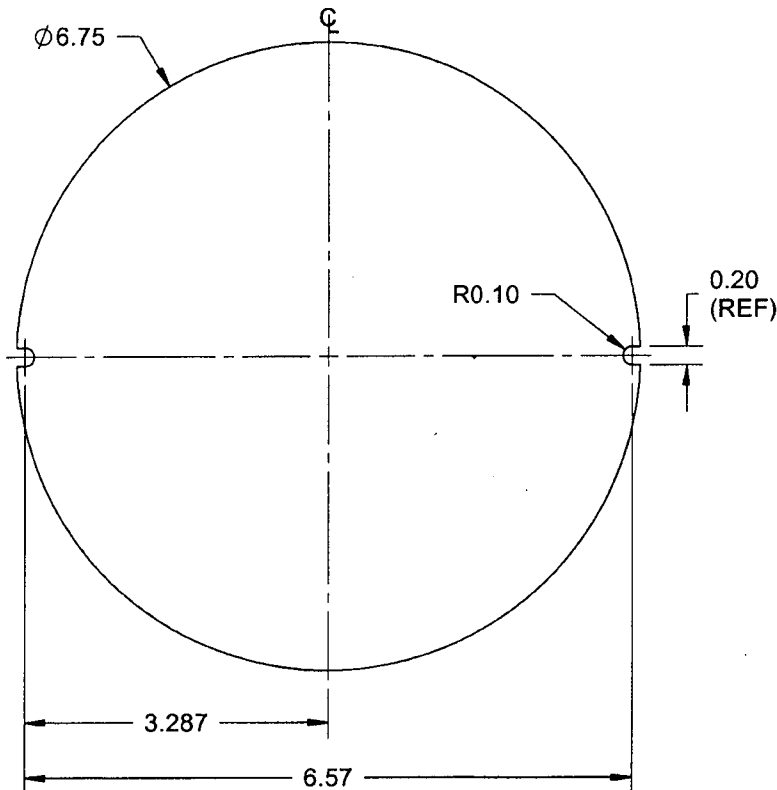
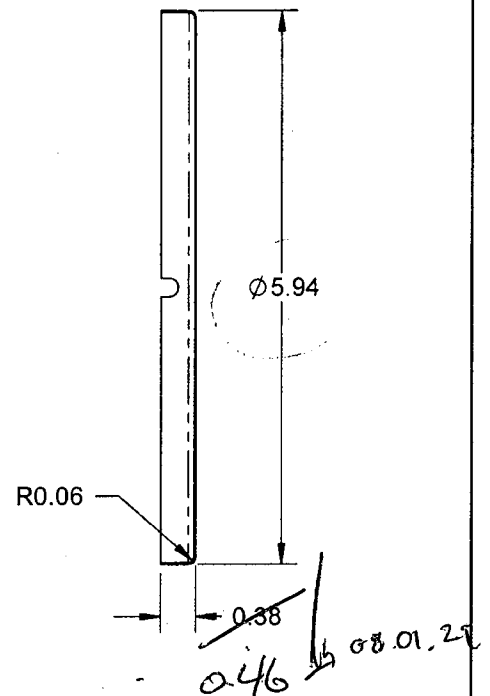
COPYRIGHT © 2006 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



**DART**

DESIGN <i>B</i>	DRAWN BY <i>B</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>H</i>	APPROVED <i>H</i>	DRAWING NO. <b>D3473</b>	REV. B SHEET 4 OF 7
DATE <b>06.05.16</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:2

**RELEASED**  
06-05-16 *H***UNDER REVIEW**07.09.16 *B*DIP + MANUFACTURING  
CHECKS08.01.18 *H***D3473-3F COVER FLAT PATTERN****D3473-3 COVER**TOP COPY  
RETURN TO  
ENGINEERINGUNCONTROLLED COPY  
SUBJECT TO AMENDMENTWITHOUT NOTICE  
WORK ORDER**NOTES:**

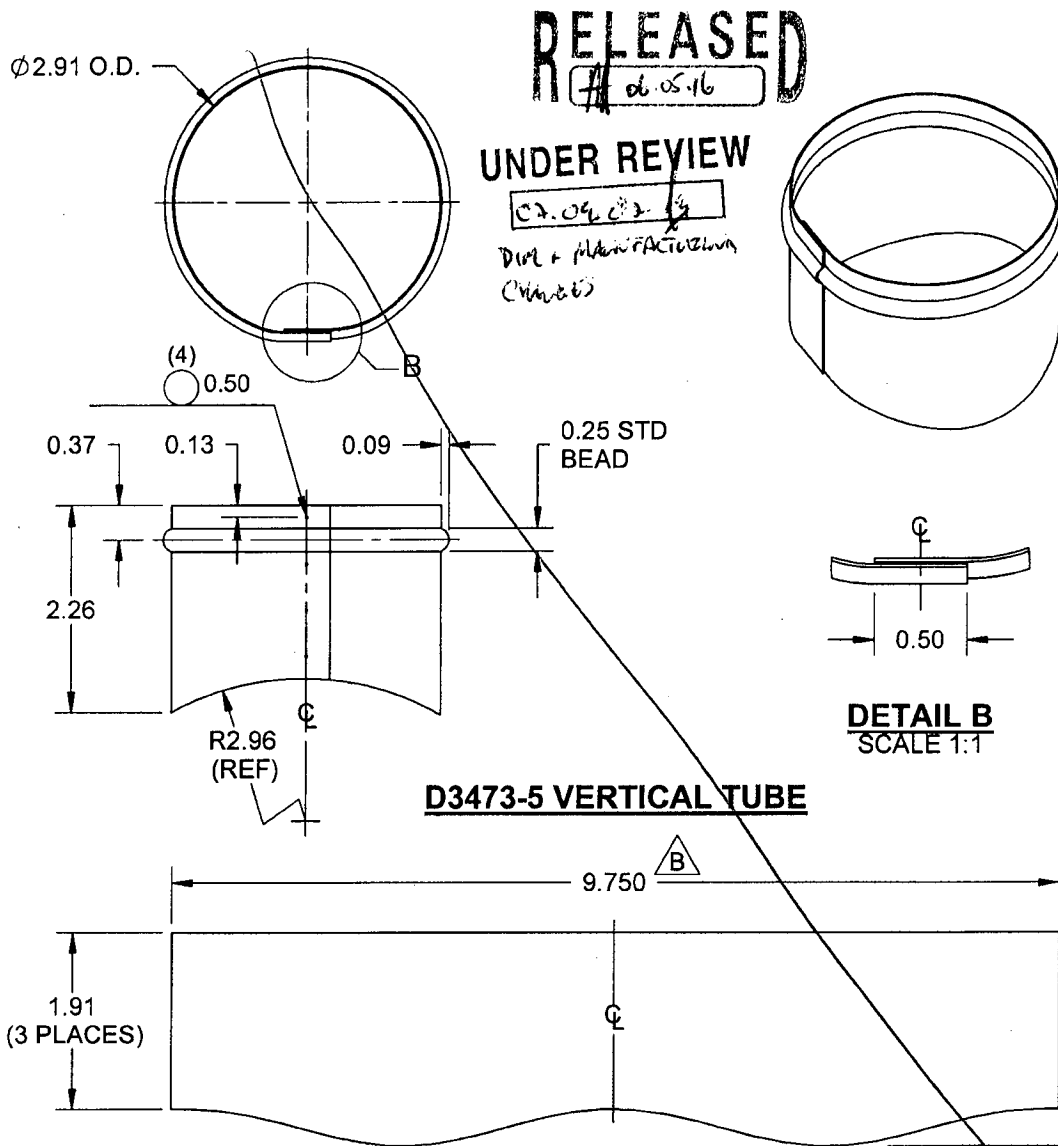
- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH, 26 GAUGE SS (0.018 THICK)
- 2) PART IS SYMMETRICAL ABOUT CENTERLINE
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

**COPYRIGHT © 2006 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN <i>13</i>	DRAWN BY <i>13</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>13</i>	APPROVED <i>13</i>	DRAWING NO. <b>D3473</b>	REV. B SHEET 5 OF 7
DATE <b>06.05.16</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:2

**D3473-5F VERTICAL TUBE FLAT PATTERN****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH 26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

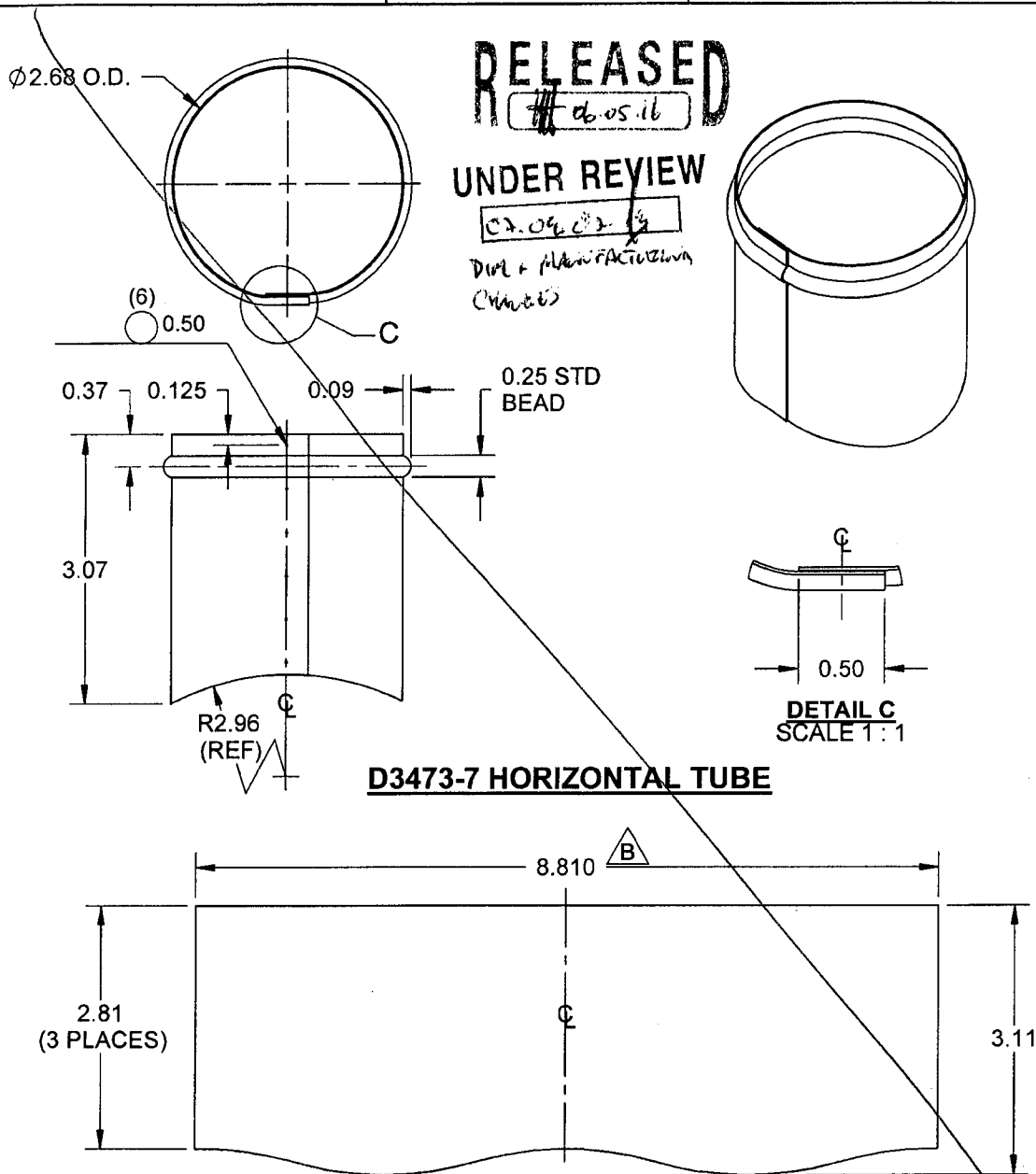
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *36813*

**COPYRIGHT © 2006 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN <i>B</i>	DRAWN BY <i>B</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>H</i>	APPROVED <i>H</i>	DRAWING NO. D3473	REV. B SHEET 6 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER	
		SCALE 1:2	

**D3473-7 HORIZONTAL TUBE****D3473-7F HORIZONTAL TUBE FLAT PATTERN****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *36813*

COPYRIGHT © 2006 BY DART AEROSPACE LTD.

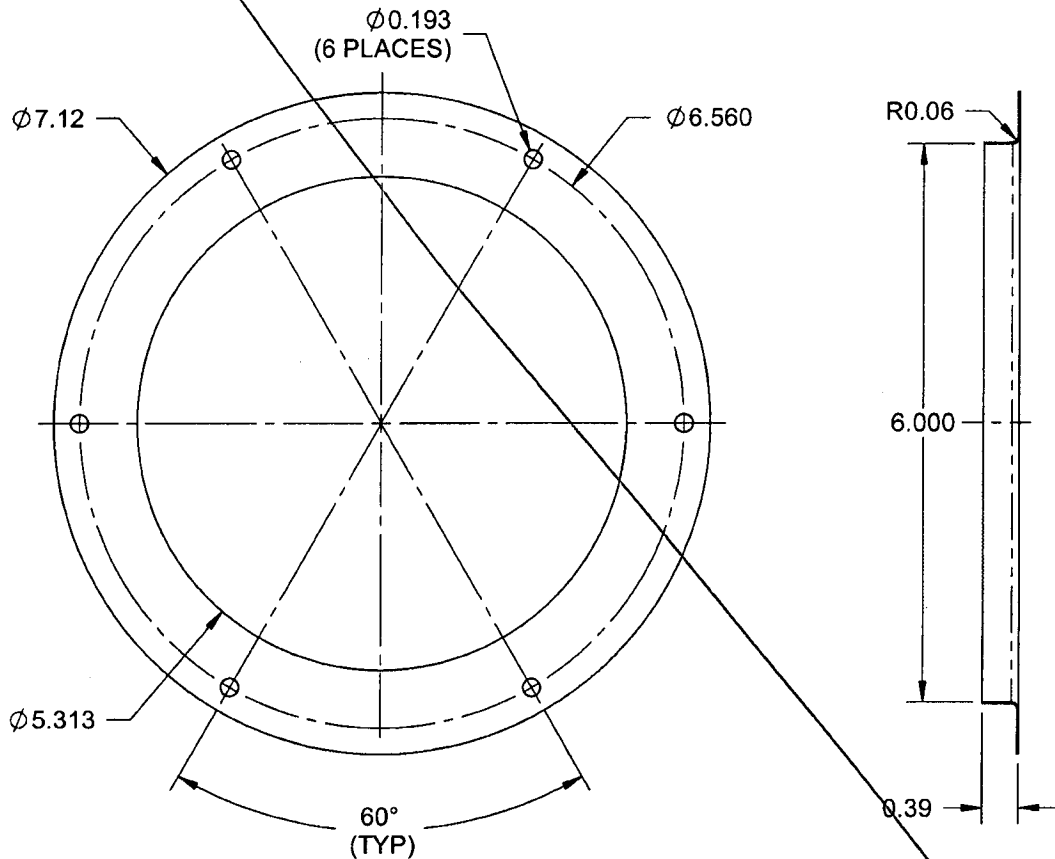
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3473	REV. B SHEET 7 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER	SCALE 1:2

**UNDER REVIEW**

02.09.13

Dim + Manufacturing  
Changes**RELEASED**  
06.05.16**D3473-9F FLANGE FLAT PATTERN****D3473-9 FLANGE  
BENDING DETAIL****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER NO. **36813**

COPYRIGHT © 2006 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.